

Pinnacle Peak West ADMS: Tonight's Agenda

- 6:00 – 6:15 pm
Open House
- 6:15 – 6:45 pm
Presentation
- 6:45 – 8:00 pm
Open House





PINNACLE PEAK WEST AREA DRAINAGE MASTER STUDY

September 18, 2014 Community Meeting

Presentation Agenda

- Study Information & Results
- Public Input
- Next Steps



August 19, 2014



PPW ADMS Characteristics:

95 square miles

Jurisdiction

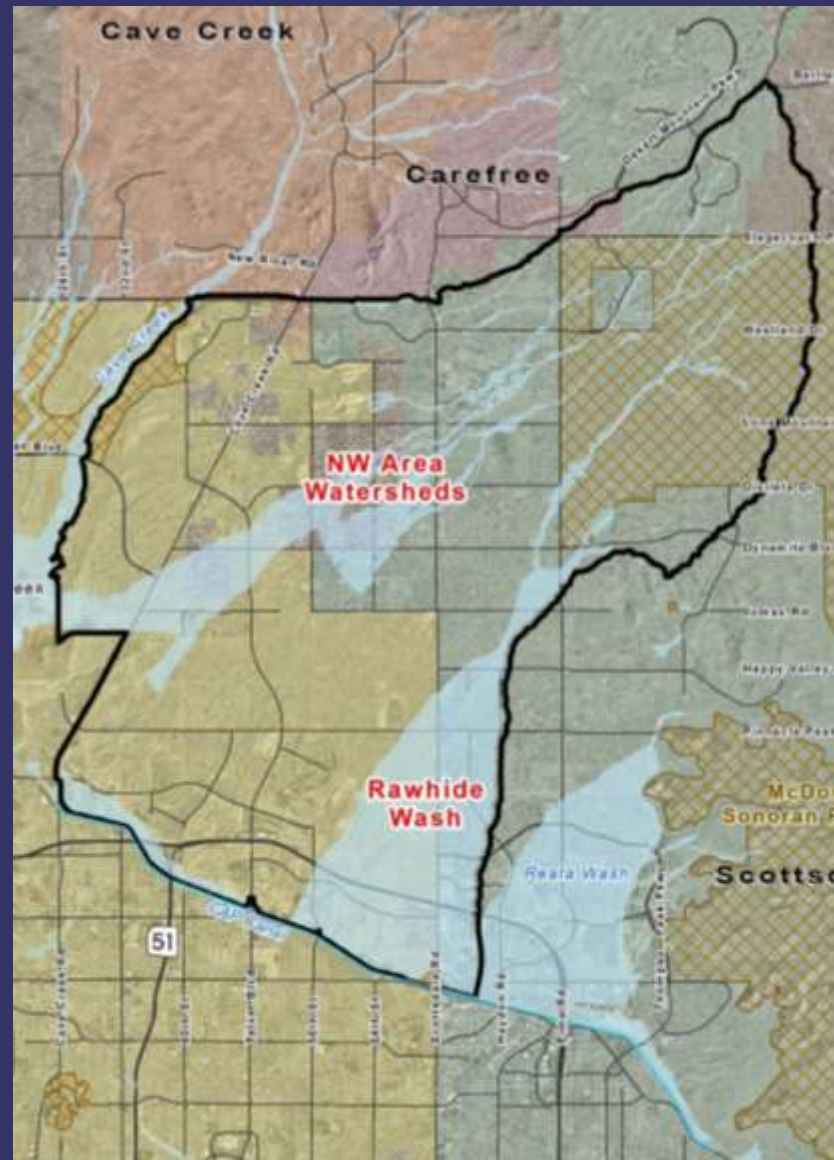
| | |
|----------------|-----|
| Scottsdale | 46% |
| Phoenix | 45% |
| Unincorporated | 8% |
| Other | 1% |

Land Ownership

| | |
|---------------|-------|
| Private | 48.7% |
| AZ State Land | 41.4% |
| Federal | 3.8% |

Project Partners

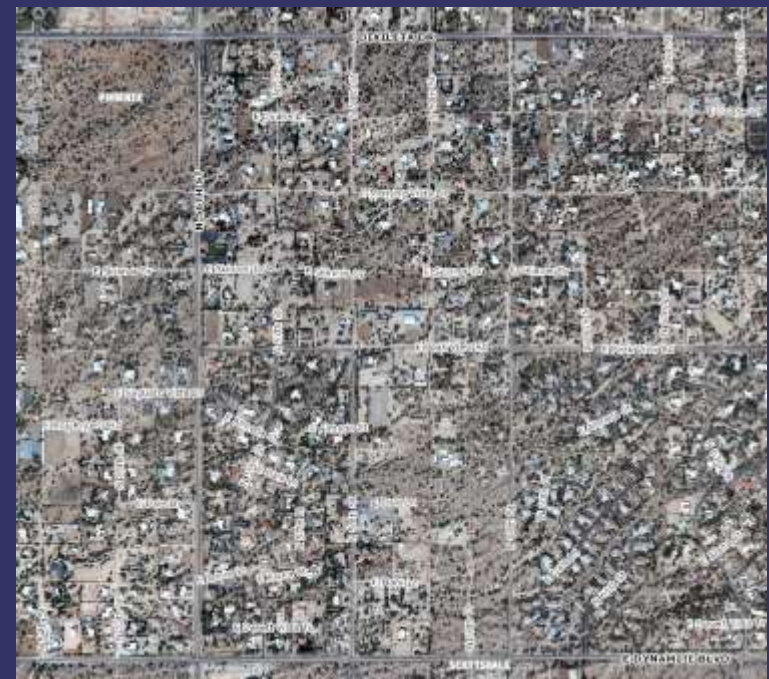
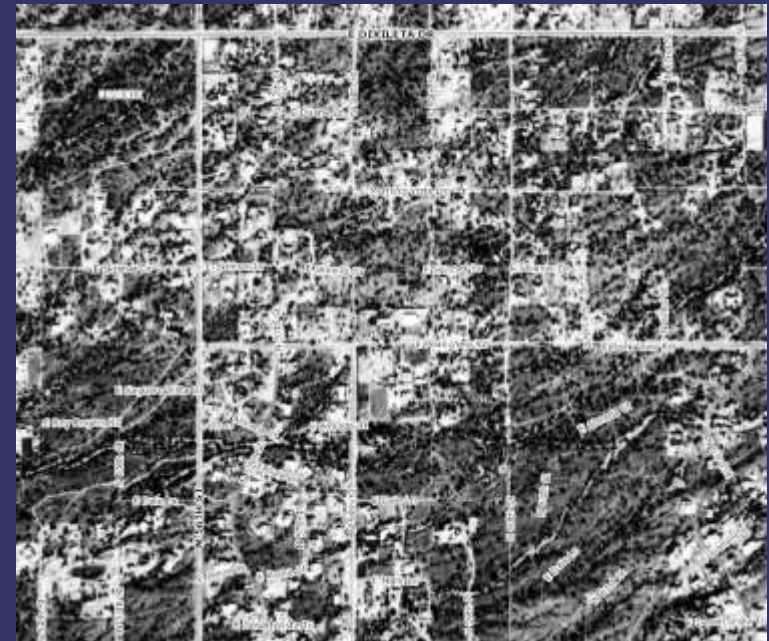
Existing Floodplains



Why study this area now?

- Dated flood studies
- Most floodplains delineated in late 1980's
 - Adopted in early 1990's
- Significant development since delineation
- Using updated technical information can better protect residents

Dixileta & 56th Street 1993 & 2013



Objective #1:

Define Existing Flood Hazards and Risks

- Data collection
 - Public, Cities, Maintenance Crews
 - Photos, videos, and other flooding data
 - HOA meetings & individual meetings
 - Web-based tools



ID Hazards

ID Problems

Develop Recommendations

Objective #1

Community Data Collection

- Met with 13 homeowners associations
 - 112 residents
- 69 surveys via FloodTalk
 - Photos submitted via email and Report-A-Flood
- Individual meetings and site visits



ID Hazards

ID Problems

Develop Recommendations

Objective #1

Define Existing Flood Hazards and Risks

- Develop new hydrology and hydraulic models
 - Latest technology
 - Updated survey and topographic mapping

Stagecoach Pass Wash July 2007



60th St. South of Carefree Hwy

ID Hazards

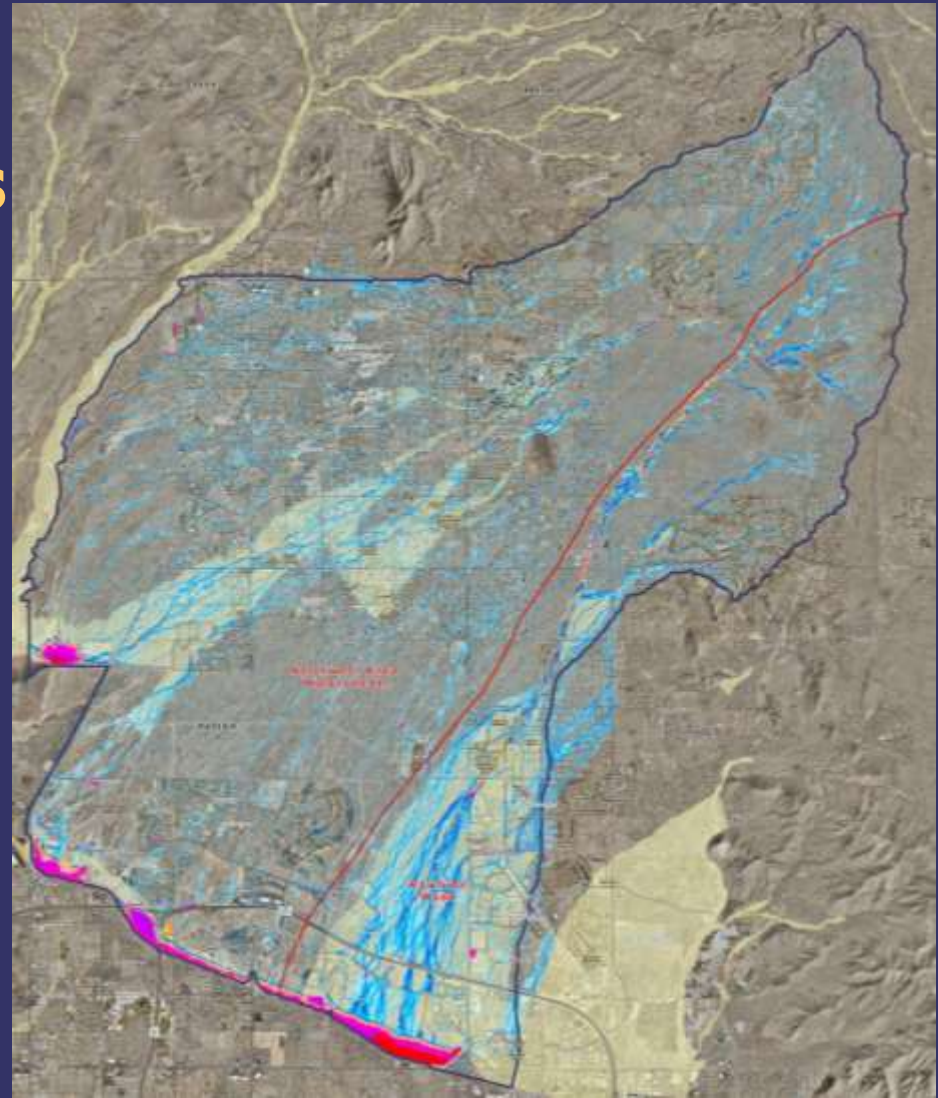
ID Problems

Develop Recommendations

Objective #1: Hydrology and Hydraulic Model Results

Three storms

- **5 inches of rain**
100 year storm (1% chance)
- **3-4 inches of rain**
25 year storm (4% chance)
- **2.5-3 inches of rain**
10 year storm (10% chance)



ID Hazards

ID Problems

Develop Recommendations

Objective #1: Hydrology and Hydraulic Model Results

- Divided into 2 focus areas
 - Rawhide
 - Northwest Area Watershed
- Differences in:
 - Flooding hazards
 - Potential solutions



ID Hazards

ID Problems

Develop Recommendations

Objective #1: Northwest Area Watershed Flooding Hazards and Characteristics

- Braided washes
- Sheet flow
- Older & more large lot development
- Smaller scale or Local solutions



ID Hazards

ID Problems

Develop Recommendations

Objective #2:

Identify the Flooding Problems and Issues

- Based on model results, data collection, public input
- Flooding Problems
 - Not all flooding hazards are problems
 - Areas with high flood risk
 - Public's perception and concerns



Street Flooding in Study Area

ID Hazards

ID Problems

Develop Recommendations

Objective #2: Flooding Problems / Issues

- Potential flooding risks to:
 - Houses
 - Roads
 - Pedestrians

Carefree Highway August 2014



Laveen September 2014

ID Hazards

ID Problems

Develop Recommendations

Objective #2: Potential Flooding Risk

- Houses & Buildings
 - Over 29,000 houses or buildings in study area
 - Over 1900 properties with houses or buildings will have flood water deeper than 6"



Carefree Highway & 60th Street



Dove Valley Road



Cave Creek Road

ID Hazards

ID Problems

Develop Recommendations

Houses with Potential Risk of Flooding

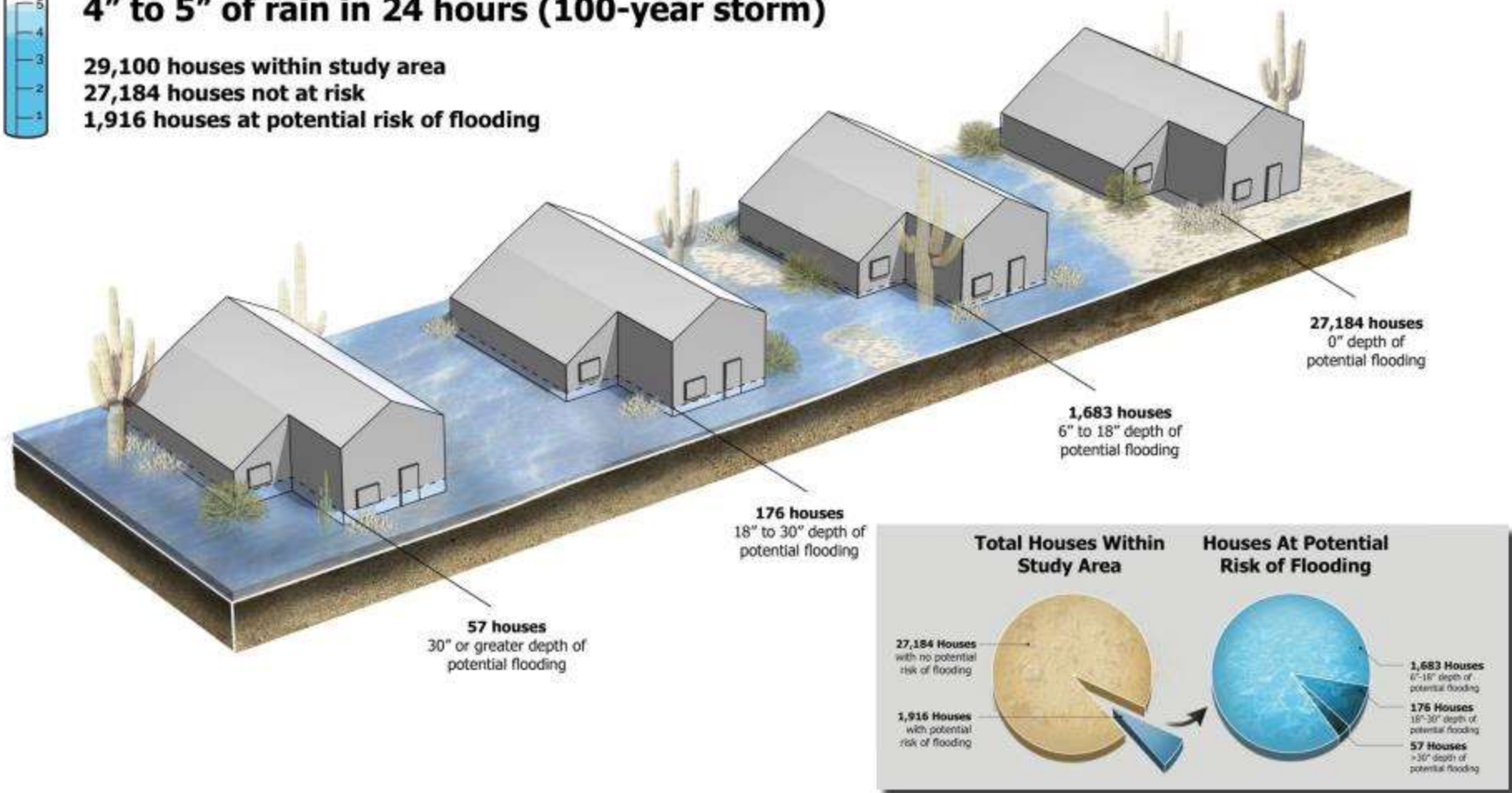


4" to 5" of rain in 24 hours (100-year storm)

29,100 houses within study area

27,184 houses not at risk

1,916 houses at potential risk of flooding



Objective #2:

Results:

- Road Hazards

- Depth and velocity that can move a car
- Over 380 identified
 - 46 arterial roads
 - 342 secondary roads

- Pedestrian Hazards

- Depth and velocity that can knock down a child
- Schools & houses

- Task in-progress



Yolantha Street August 2014



Pedestrians
Rescued
from Indian Bend
Wash - 2014

ID Hazards

ID Problems

Develop Recommendations

Objective #2:

How tolerant are you of flooding risks?

- Tolerance Survey
 - Determine which problems the public wants fixed
- Tolerance to flooding scenarios
 - Nuisance
 - Possible action
 - Problem
- 110 responses



ID Hazards

ID Problems

Develop Recommendations

Tolerance Survey Results

- **Street Flooding**

- Nuisance:
 - Can still drive on road
- Possible Action:
 - Road closed a few hours
- Problem:
 - Road closed from more than a few days



Tolerance Survey Results

- **Property Flooding**

- Nuisance:

- Water at edge of property

- Possible Action:

- Water up to front door

- Problem:

- More than 1" of water in home



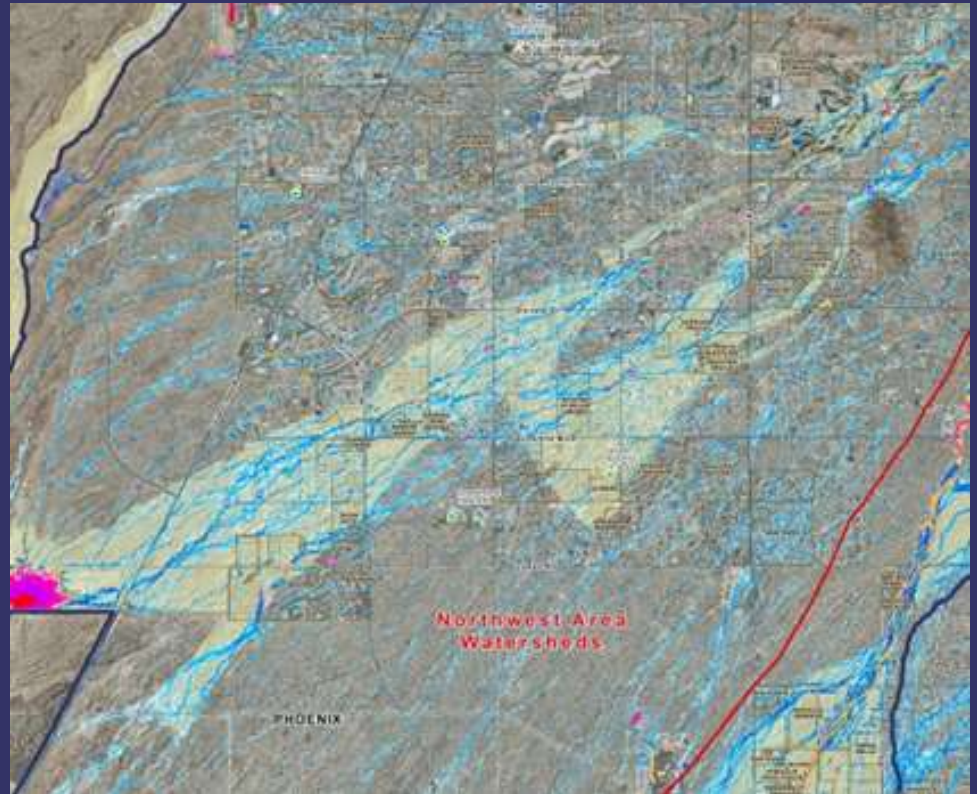
PPW ADMS— Northwest Watershed Next Steps

- Finish identifying the flooding problem areas
 - Data collected from the public from tonight
 - Recent storm data
- Prioritize Problem Areas
- Develop a list of potential solutions



PPW ADMS— Northwest Watershed Next Steps

- Initiate floodplain redelineation study
 - Needs FEMA approval
 - Long process
 - End results could remove some, not all from the 100-yr floodplain
- Next Public Meeting:
 - Spring 2015
 - Discuss recommendations and potential solutions



Summary

1. Purpose of study is to identify and reduce people's risk of flooding
2. In some areas, significant flood hazards do exist
3. This is a collaborative process
 - We want to continue to have your input on which problems should be addressed



Open House

- 6:45 to 8:00
 - Identify Problems and Issues
 - Maps
 - Laptops
 - Survey
 - Review Results
 - General Flooding Info
 - Exhibits
 - Cities
 - Floodplain Table

